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February 3, 2009

Greg Dunn  
Voluntary Site Remediation Unit B  
Remedial Project Management Section  
Division of Remediation Management  
Bureau of Land  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois

US EPA RECORDS CENTER REGION 5



**SUBJECT: Response to Comment Letter dated December 22, 2008  
0190100008/Champaign County  
Champaign/IP Town Gas  
Site Remediation Program/Technical Reports**

Dear Mr. Dunn:

In response to the Illinois Environmental Protection Agency (IEPA) letter to AmerenIP dated December 22, 2008 regarding the IEPA comments to the Champaign MGP Remedial Objectives Report dated December 5, 2008 (ROR), and the Champaign MGP Remedial Action Plan dated December 2008 (RAP), the following is a response to each comment. Clarifications and additional information have been provided in addition to the revised text, tables, and figures for the ROR and RAP. The IEPA comments are provided prior to each response.

Remedial Objectives Report, December 5, 2008:

1. The Illinois EPA understands the remediation objectives for the site will be the most stringent remediation objective established in 35 Illinois Administrative Code ("IAC") Part 742 (Tiered Approach to Corrective Action Objectives ("TACO")) or the remediation objectives proposed for the indoor inhalation pathway. Reviewing the tables, many of the compounds have soil migration to groundwater remediation objectives below the project remediation objectives established in Table 7-1. Please explain the discrepancy.

*We intend to meet the Tier 1 Residential ROs. The City of Champaign has recently enacted an Illinois EPA-approved groundwater ordinance. We intend to use this institutional control to address the groundwater ingestion and soil migration to groundwater ROs. We intend to use a combination of soil excavation, in situ treatment, engineered barriers or institutional controls to meet the relevant objectives. Table 7-1 of the ROR includes the correct project ROs. Table 2-1 of the RAP has been revised to reflect the correct project ROs (attached).*

2. For your information, the remediation objectives used in the ROR for the indoor inhalation pathway are remediation objectives proposed by the Illinois EPA for this new pathway. These remediation objectives will not take effect until the changes to TACO have been adopted by the Illinois Pollution Control Board.

*Thank you for the clarification. We do understand that these ROs are only proposed and are not yet formally required in the SRP/TACO process. We recognize that in addressing these ROs now, we are being more conservative than required by the current regulations. Nevertheless, we expect that the next TACO update will be adopted before we receive an NFR letter for the site. Therefore, we intend to address the Indoor Inhalation pathway.*

3. Executive Summary (page ii): The Executive Summary states there are 21 compounds of concern in groundwater, however Tables ES-1 and 3-1 only identify 20 compounds. Please clarify.

*Twenty (20) constituents of concern have been identified in groundwater on site. The executive summary (page ii) of the Remedial Objectives Report has been changed to state "Twenty-six constituents of concern (COC) in soil and twenty COC in groundwater have been identified." The revised page is attached.*

4. Page 12 – Soil Attenuation Capacity – The soil samples collected in 1996 for analysis of total organic carbon were not collected using the current method (ASTM Method D2974) and cannot be used to determine soil attenuation capacity. The default value of 2,000 mg/kg below one meter should be used or additional soil samples should be collected for total organic analysis using ASTM Method D2974. The appropriate conversion factor as identified in 35 IAC Part 742.215(b)(1)(B) should be applied to the result. Also, the soil samples should be collected in uncontaminated areas of the site, within the native soil horizon and also analyzed for volatile organic compounds ("VOCs") and semi-volatile organic compounds ("SVOCs").

*The default value of 2,000 mg/kg below one meter will be used in determining the soil attenuation capacity until site-specific data can be collected using the currently approved method. Page 12 and Table 3-21 have been modified accordingly and are attached. ASTM Method D2974 for the analysis of total organic carbon will be used for determining soil attenuation capacity in the future.*

5. Page 13 – PCBs have not been included as a constituent of concern for the No Further Remediation ("NFR") letter, but the Remedial Action Plan requests a comprehensive NFR letter.

*No historical evidence or analytical data suggests or indicates the presence of PCBs on site. PCBs are to be included as constituents of concern in order to meet the requirements for a comprehensive NFR letter as stated in the RAP. Page 13 of the ROR has been modified accordingly (attached).*

6. Page 19 – The Illinois EPA will require a Class V Injection Well Inventory Form be submitted for the in-situ chemical oxidation activities. The form can be found at <http://www.epa.state.il.us/land/regulatory-programs/permits-and-management/class-v-injection-well-inventory-form.html>. One copy of the form should be mailed to Mr. Bur Filson, UIC Coordinator, Mail Code #224, Illinois EPA, 1021 North Grand Avenue



East, P.O. Box 19276, Springfield, Illinois 62794-9276. One copy should also be included with the submittal addressing the comments in this letter.

*We will conduct a treatability study to obtain additional information and determine the most effective in-situ chemical oxidation procedure. Upon completion of the treatability study, the Class V Injection Well Inventory Form will be completed and submitted as requested.*

7. Table ES-1 and Table 3-1 are identified on the List of Tables as the constituents for inclusion in the focused NFR letter. However, the Remedial Action Plan requests a comprehensive NFR letter. Please clarify.

*AmerenIP intends to meet the requirements for a comprehensive NFR letter, therefore the List of Tables has been modified (attached).*

Remedial Action Plan, dated December 2008:

1. The Illinois EPA understands this RAP addresses only the contamination located within the boundaries of the remediation site as identified in the Illinois EPA's Site Remediation Program ("SRP"). Any off-site contamination issues will need to be addressed as separate sites enrolled in the SRP.

*Upon approval from the respective property owners, each affected off-site property will be enrolled in the SRP.*

2. The Illinois EPA understands the remediation objectives for the site will be the most stringent remediation objectives established in 35 Illinois Administrative Code ("IAC") Part 742 (Tiered Approach to Corrective Action Objectives ("TACO")) or the remediation objectives proposed for the indoor inhalation pathway. Reviewing the tables, many of the compounds have soil migration to groundwater remediation objectives below the project remediation objectives established in Table ES-2 and Table 2-1. Please explain this discrepancy.

*We intend to meet the Tier 1 Residential ROs. The city of Champaign has recently enacted an Illinois EPA-approved groundwater ordinance. We intend to use this institutional control to address the groundwater ingestion and soil migration to groundwater ROs. We intend to use a combination of soil excavation, in situ treatment, engineered barriers or institutional controls to meet the relevant objectives. Table 7-1 of the ROR includes the correct project ROs. Table 2-1 of the RAP has been revised to reflect the correct project ROs (attached).*

3. Figure 2-3 through 2-5 identify the extent of contamination exceeding the soil ingestion, soil inhalation, soil migration to groundwater, indoor inhalation or groundwater. The extent of contamination is depicted on these figures as remaining on-site although the Illinois EPA recognizes there are off-site exceedances. The maps should clearly state the exceedances are for on-site only and off-site contamination exists which will be addressed individually with off-site property owners.

*Although off-site impact has been identified, the on-site RAP addresses only the impact identified within the Ameren property line. Any off-site impact will be addressed in separate RORs and RAPs for each individual property. For clarification purposes, Figures 2-3 through 2-5 were changed to state: "Tier 1 RO exceedances are shown for*

*on-site only. Off-site exceedances exist beyond the Site property boundary and will be addressed individually with separate RORs and RAPs." The revised figures are attached.*

4. The Illinois EPA does not review health and safety plans. However, any health and safety plan prepared and submitted to the Illinois EPA should be consistent with the Occupational Safety and Health Administration guidelines.

*The project health and safety plan will be consistent with applicable guidelines and regulations.*

5. The Illinois EPA understands certain details of the Remedial Action Plan are still under discussion or being finalized. Once this information (such as the disposal facility for the soil, truck routes, water discharge permit, etc.) is finalized, please forward the information onto the Illinois EPA.

*Details regarding trucking, disposal, wastewater treatment, etc. will be forwarded to the IEPA as soon as they are finalized.*

6. Page 11 – The backfill material brought to the site for the excavated areas shall be sampled and meet the Tier 1 residential remediation objectives.

*Backfill material from an approved local source will be sampled and analyzed prior to being transported on site. The analytical results will be provided to the IEPA.*

7. Certain chemical oxidation reactions precipitate out additional metals after treatment. To verify these metals do not exceed remediation objectives, the confirmation soil and groundwater samples from the in-situ chemical oxidation areas should also be analyzed for all the inorganics in 35 Illinois Administrative Code Part 740 Appendix A, Table D.

*Analysis for confirmation samples collected after in-situ chemical oxidation will include all inorganics in 35 IAC 740 Appendix A, Table D.*

8. If institutional controls or engineered barriers are required at this site, please address those requirements in the Remedial Action Completion Report.

*Any institutional controls or engineered barriers that may be required on site will be documented in the Remedial Action Completion Report.*

If you have any questions or require additional detail, please feel free to contact me at the above address, by phone, (314) 554-2233 or e-mail me at [bmartin2@ameren.com](mailto:bmartin2@ameren.com).

Sincerely,



Brian H. Martin, CHMM, MBA  
Consulting Environmental Scientist





210 West Sand Bank Road  
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## LETTER OF TRANSMITTAL

To Lori Muller  
USEPA Region 5  
77 W. Jackson Blvd (SE-5J)  
Chicago, IL 60604

Date 2-4-09  
Project Champaign MGP  
Project No. 62403053

1. ( ) FOR REVIEW & COMMENT
2. ( ) FOR APPROVAL
3. ( ) AS REQUESTED
4. ☒ FOR YOUR USE
5. ( )

Enclosed ( ) / Under separate cover ( )

NO. OF COPIES	DESCRIPTION
1	Response to IEPA Comments
1	Revised pages of Remedial Objectives Report (ROR)
1	Revised pages of Remedial Action Plan (RAP)
1	CD Revised ROR & RAP

REMARKS: Lori,  
The IEPA provided comments on the ROR and RAP, and attached  
is a copy of Ameren's response to the comments. Also enclosed  
are revised pages for the ROR and RAP. Please replace the  
original pages with these. Also replace the CDs with the  
enclosed one. Thank you.

COPIES FORWARDED TO:


FROM L. Hoosier  
TITLE Environmental Scientist